

Petro Board has new members

OVERNOR JUDY MARTZ has appointed three members of the Petroleum Tank Release Compensation Board, adding two new faces.

ROGER Noble was appointed as a representative of the petroleum services industry or a representative of the petroleum release remediation consultant industry. He is with Land and Water Consulting and is located in their Kalispell office.

GREG Cross was reappointed as a representative of independent petroleum marketers and chain retailers. He is owner of Cross Petroleum Service and resides in Billings.

SHAUN PETERSON was appointed as a representative of the insurance industry. He is with Montana International Insurance, a division of Payne Financial Group, in their Helena office. Look for their profiles in upcoming MUST News.

The appointees join existing board members:
Chairman Barry Johnston, Big Fork, of Glacier
Bank; Vice Chairman Dan Manson, Butte,
of Corette, Pohlman, & Kebe law firm;
Terry Cosgrove, Helena, of Blue
Cross Blue Shield of Montana; and
Frank Schumacher, Great Falls, of

Mountain View Coop.

continued on page 2

Inside This Issue

on proposed rule changes
Classes, testing set for installers, removers, inspectors
Time your compliance inspection accurately
Petroleum company rebuilds headquarters, closes stations
Gas spills, but disaster averted in Thermopolis 5
The Missing Link in Overfill Prevention 6
MTBE-munching microbes 10
Tank inspections required 90 days before permits expire

Why doesn't MUST News ever write about..? 12



Underground Storage Tank Section 1520 East Sixth Avenue • Helena, MT 59620-0901 Phone: 406-444-5300 • Fax: 406-444-1374

Petroleum Release Section • Petroleum Tank Release Compensation Board 1100 North Last Chance Gulch. • P. O. Box 200901 • Helena, MT 59620-0901 Phone: 406-841-5016 • Fax: 406-841-5091 • E-mail: ustprogram@state.mt.us Web: www.deq.state.mt.us/rem/index.asp

Petro Board has new members - continued from page 1

The 1989 Montana Legislature created the board and the Cleanup Fund. The board consists of seven members who serve three-year terms. All of the terms end in June, however, they alternate on a three year cycle. Three of the board positions had terms that ended June 30, 2004. The governor tries to assure state-wide representation by appointing residents from different areas of the state.

The board meets in Helena about every eight weeks. Most meetings are scheduled to begin at 10 a.m. Contact the board to confirm the meeting date and

time by telephone at (406) 841-5091, or visit the board's Web site:

deq.state.mt.us/pet/meetings.asp.

The meetings are held in Room 111 of the Metcalf Building, 1520 East Sixth Avenue, Helena.

If you are interested in becoming a member of the PTRC Board, contact the Governor's Board & Commission office at (406) 444-3111 or visit their web site at: http://discoveringmontana.com/gov2/css/vacancies/vacancies.asp.

PTRCB seeks comment on proposed rule changes

he Petroleum Tank Release Compensation Board has proposed changes to the applicable rules governing the operation and management of petroleum storage tanks.

The first major change to this rule was brought about by the adoption of the National Fire Protection Association 1 Uniform Fire Code of 2003 by the Montana Department of Justice, Fire Prevention and Investigation Section. The provisions of the NFPA1\UFC proposed for adoption by the Petro Board are parallel to the current referenced section of the Uniform Fire Code.

The second proposed amendment to these rules pertains to the requirement to empty inactive underground storage tanks. The existing rule described these tanks as "temporarily closed." This amendment is necessary because in December 2003 the Montana Department of Environmental Quality amended its administrative rule, ARM 17.56.701, to refer to "inactive" tanks, rather than "temporarily closed" tanks.

The last proposed change is necessary because the DEQ no longer issues compliance plans. The amendment would simply require an owner or operator of underground storage tanks to have one of the two relevant permits issued by the department, such as a valid operating or conditional permit. An owner or operator who complied with

the permit requirements could then be determined by the board to be in compliance with the underground tank installation and design standards, spill and overfill prevention and corrosion protection requirements, release prevention and detection requirements, and testing, monitoring and recordkeeping requirements.

The board will hold a public hearing on these proposed rule changes November 16, 2004, at 10:00 a.m. in Room 112, 1100 North Last Chance Gulch, Helena, Montana.

Concerned persons may submit their views or arguments concerning the proposed amendments either orally or in writing at the hearing. Written data, views or arguments may also be submitted to Terry Wadsworth, Executive Director, P.O. Box 200902, Helena, Montana 59620-0902; faxed to (406) 841-5091 or e-mailed to Terry Wadsworth at **twadsworth@state.mt.us** no later than November 4, 2004.

NOTICE Public Hearing on Rule Changes

November 16, 2004 – 10:00 a.m. Room 112 1100 No Last Chance Gulch Helena, Montana

Classes, testing set for installers, removers, inspectors

he Montana Department of Environmental Quality has scheduled refresher classes November 8-9 in Helena for underground storage tank installers, removers and inspectors.

The inspector-refresher course is Monday, November 8, at 8 a.m. The refresher class for installers is Tuesday, November 9 at 8 a.m and the class for removers also is on November 9 at 1 p.m. Anyone who is currently licensed for underground storage tank work can attend the classes for continuing education credits. Both classes will be held at the DEQ's Metcalf Building, 1520 East Sixth Avenue, Helena.

The department is also sponsoring training and testing of individuals who desire to be licensed as compliance inspectors. The class is scheduled November 15-18, 2004. The class is open to anyone who wishes to be licensed to inspect underground storage tank systems in Montana. Pre-registration is required. Please submit the registration form 20 days prior to the course date.

Also on November 15-16, licensing tests will be offered for installers/removers, removers, installers of corrosion protection, tank liners and external leak-detection equipment. Written tests are open to

all applicants for new licenses and to those who must retest to maintain current licenses. All new applicants must register and submit a \$100 fee to the Department of Environmental Quality, Waste and Underground Tank Bureau, P.O. Box 200901, Helena, MT, 59620-0901.

Montana law requires licensing of anyone who installs, closes, repairs, modifies or inspects underground storage tank systems, including underground piping connected to above-ground tanks. Similarly, the law requires licensing of anyone who installs corrosion-protection or external leak-detection equipment on underground storage tank systems.

The department will make reasonable accommodations for persons with disabilities who wish to participate in these classes or need an alternative accessible format of this notice.

If you require an accommodation, please contact Redge Meierhenry, phone (406) 444-1417, fax (406) 444-1374, or e-mail rmeierhenry@state.mt.us.

More information is available from the Waste and Underground Tank Bureau on request by calling (406) 444-5300.

Dates to Remember

November 8, 2004 – 8:00 a.m. Inspector-refresher course November 9, 2004 – 8:00 a.m. Refresher class for installers

November 9, 2004 – 1:00 p.m. Class for removers

November 15-16, 2004 Licensing tests for installers/removers, removers, installers of corrosion protection, tank liners and external

leak detection equipment

November 15-18, 2004 Training and testing for individuals interested in being

licensed compliance inspectors

Future continuing education classes by the Montana Underground Storage Tank Section will be offered only once annually in the fall. Monitor your CEUs.

Time your compliance inspection accurately

ontana underground storage tank rules require owners to obtain a compliance inspection at least 90 days before expiration of an operating permit. To encourage owners to inspect early and lose no time on their three-year operating permits, the UST Program has adopted the following policy:

If the department receives an inspection report within 6 months prior to the existing Operating Permit's expiration date, the expiration date of the new Operating Permit will keep the same anniversary date.

However, some owners are purposely trying to change their anniversary date, so the policy also clarifies that: If the department receives an inspection report prior to 6 months of the existing Operating Permit's expiration date the expiration date of the new Operating Permit will be three years after the date the department receives the inspection.

The UST section supervisor can approve certain exceptions to this policy regarding anniversary dates. Anniversary dates may be accelerated but may not be extended or postponed.

For additional information and/or clarification contact Bill Rule, (406) 444-0493, or e-mail: **brule@state.mt.us**.

Petroleum company rebuilds headquarters, closes stations

By Robert Struckman of the Missoulian, Sept. 24, 2004, and Jason Mohr of the Helena Independent Record, Sept. 28, 2004.

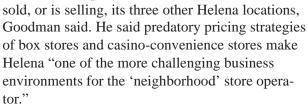
Reprinted by permission

Reconstruction of the headquarters of Hi-Noon Petroleum - destroyed by fire in March 2003 - is nearly completed. The fire and subsequent rebuilding has sparked the family-owned group of companies to restructure as part of a continuing struggle to find profitable ventures in a tough retail economy.

The group has been trying to get out of the gasoline retail side for about six months. Fifteen of its 20 stores have been for sale since last spring. The stores have performed okay, said co-owner Bill Nooney Sr., but not good enough.

Hi-Noon Petroleum has shuttered its East Helena gas station and convenience store. The closure leaves only one Noon's station operating in the Helena area, at 1318 Euclid Avenue. Company President Chris Goodman said "the reality of

industry economics" forced the closure of the store. The company has



Noon's

Town Pump operates two gas station-convenience store combos - with casinos - at either end of East Helena along Highway 12. In Helena, the locations at 11th Avenue and Cedar Street stand idle and the former North Last Chance Gulch site is now a Starbucks coffee shop. Goodman said the company has an offer on the Cedar Street site. The problem, Nooney said, is that the stores are difficult to run as a chain. With retail gas prices undercut by low-cost

continued on page 5

Petroleum company rebuilds headquarters, closes stations - continued from page 4

pumps at grocery stores and Costco, Nooney said, the profit margins for smaller stores such as Noon's Food Stores have shrunk.

The family's enterprises, with about 250 employees, include a regional petroleum distribution company as well as several casinos and a truck stop. Nooney said the company plans to retain five Noon's stores in the Missoula area.

Some of the changes at the company have involved the shifting of top personnel. "We want to get the most out of ourselves," Nooney said. But its newest employee has the potential to affect the most change, Nooney said. Arlee Tucker most recently was in charge of 101 stores in Washington, Oregon, and northern California for Conoco Phillips. She will direct retail operations and plans to revamp Noon's look to make the stores more competitive, Nooney said.

"This is about getting our house in order. This is where Arlee Tucker comes into play. She'll just do a super job for us," Nooney said. The stores in Missoula have been successful, Nooney said, but the ones for sale in smaller towns have generated less income. They're not selling fast." It's a capital-intensive business. Every time you sneeze, it costs you \$50,000 dollars," he said. The ones he has sold have gone to individuals and families. Those do fine, he said. But as part of a corporation, with higher administrative costs, more merchandise has to be moved for them to turn a strong profit.

The casinos have been a profitable part of the family's enterprise, Nooney said. He will look to grow that end of things, although he won't "limit the scope" of the company's possible expansion, he said. All these changes will happen at the company's 12,000 feet of rebuilt lodging. "We're trying to figure out a way to survive," Nooney said.

Gas spills, but disaster averted in Thermopolis

By Allison Batdorff Billings Gazette Wyoming Bureau

Reprinted by permission

HERMOPOLIS - This town lucked out Thursday (Sept. 23, 2004) as a gasoline leak could have blown apart a block of its downtown, according to Emergency Management Coordinator Bill Gordon.

"One cigarette butt and this would have been a Hollywood action sequence," Gordon said. "It would have been an enormous explosion."

About 3,800 gallons of gasoline sloshed across the street and entered the city's storm sewer system late Wednesday night after a hit-and-run driver collided with a gas pump at the Phillips 66 Station located on Highway 20 (Sixth Street) and Warren Street.

The gas station closed at 11 p.m., but the pump was still running for after-hours credit card customers. The check valve malfunctioned, and no one noticed the leak until a police officer found it hours later. By that time, an 8-inch pool of gasoline stood underground, stretching a block long. Gasoline vapor readings on the street were at 100 percent, Gordon said.

At 2 a.m., the Thermopolis hazmat team, police department, volunteer fire department and the Wyoming Department of Transportation went to work. They were still at it when Francis Smith arrived at her job at the Chamber of Commerce and found the building behind yellow tape.

Gas spills, but disaster averted in Thermopolis - continued from page 5

"I went there to try and park my car this morning, but they advised me not to go in," Smith said.

A city block was cordoned off and other businesses - like the Old West Wax Museum, a body shop and a trucking company - were closed down for the day. Traffic was detoured off the highway onto city streets.

The cleanup was under clear skies; this was another stroke of luck, Gordon said. A rainstorm could have flushed the gasoline straight into the nearby Bighorn River.

"We contacted the Environmental Protection Agency, the Department of Environmental Quality, the Homeland Security, Burlington Northern Railroad - everybody's first concern was the river," Gordon said.

Though the gasoline would not have entered the residential water supply, it would have been a big mess, said Dan Stansill, assistant to the mayor. But luckily the underground catch basin located less than a block away from the gas station prevented that from happening, he said.

"We were so fortunate," Stansill said. "When Sixth Street was rebuilt in 2000, a reservoir was constructed beneath the road to catch flood waters. That it trapped the gas before it got to the river is a side benefit."

Still, the cleanup was extensive. Pump trucks emptied the catch basin - water and all - and transported it to a city pit for separation. Gas, as the lighter liquid, floated to the surface where it was skimmed off and transported to the Sinclair refinery in Casper for reprocessing. Then the whole area had to be ventilated, as vapors had to be knocked down to 1.4 percent before the road and businesses could be reopened. It was anticipated that the work would be completed by Thursday evening, Gordon said.

The bill for the cleanup and extensive overtime will be presented to the culprit's insurance company, said Thermopolis Police Chief Jim Weisbeck. Once the area around the gas station loses its "hazmat hot zone" status, police will begin their investigation.

"We may have a witness and we are vigorously pursuing all leads," Weisbeck said. "This was potentially a very dangerous situation."

The Missing Link in Overfill Prevention

By Ben Thomas

The fundamental gap in preventing overfills lies not in the overfill equipment of the UST system or the safe highway transport to a gas station, but rather in the routine delivery of the product to the tanks.

regulator, I've grappled with nearly every imaginable topic pertaining to UST prevention equipment and operations. Frustrating and convoluted topics, such as heating oil tank exemptions, leak detector testing "per manufacturer" specifications, or the secret language of insurance reporting requirements are just day-inthe-life fodder for tank bureaucrats like myself and others around the country.

But I must confess I met my match when I uncovered a little regulation that I had somehow missed all these years—a regulation that has gone quietly unnoticed by government and industry alike. It's a seemingly docile regulation that, when taken at face value, could have saved a number of lives in the past 10 years had it been taken seriously. I'm talking about overfill prevention—not the "must-have-overfill device-or-high-level-alarm" aspect. That much we know. It's equipment. Must be there. What

The Missing Link in Overfill Prevention - continued from page 6

I'm talking about is the regulation that is supposed to prevent human error from causing an overfill—40 CFR 280.30(a). You know, the regulation that says the owner/operator must ensure that there is enough room in the tank prior to delivery and make sure the transfer is completely monitored...you know that rule, right? You enforce it, right? You look for proof of this thing every time you inspect an UST, right?

Blip Blip

If this regulation is news to you, take heart, it was news to me until last year when I came across it by accident. I had been reading the National Transportation Safety Board (NTSB) report on the 1998 Biloxi, Mississippi, tank overfill tragedy in which five people were killed and found, among many things, a reference to that particular law. I kept blipping over the requirement each time I browsed the regulations.

That's weird, I thought. I didn't think there was a requirement for the fuel delivery itself. I started asking around to see how to handle this requirement. Here are some of the responses I received:

"I never look for that." (*state inspector*)

"I don't know how you could measure that." (federal inspector)

"I think it's a worthwhile issue, but we have no jurisdiction in that area." (*industry representative*)

"Expecting UST operators to monitor fuel transfers is an inconvenience." (*industry representative*)

"We can't enforce this requirement unless there is a spill." (federal official)

The Problem

Federal UST regulations currently require owners and operators to perform two important tasks related to preventing overfill. The two requirements state: "The owner and operator must ensure that the volume available in the tank is greater than the

volume of product to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling." [Emphasis added.] Currently there is no recommended practice, industry standard, or code that provides effective guidance to owners and operators for measuring, much less achieving, these two things.

But wait, you cry, there is guidance referenced in the regs, I've seen it. Well, yes, the regulations do provide references in 40 CFR 280.30(a) by stating:

The transfer procedures described in National Fire Protection Association Publication 385 may be used to comply with paragraph (a) of this section.

Further guidance on spill and overfill prevention appears in American Petroleum Institute Publication 1621, "Recommended Practice for Bulk Liquid Stock Control at Retail Outlets," and National Fire Protection Association Standard 30, "Flammable and Combustible Liquids Code." Have you ever read these three documents? They really don't have much to do with the issue. I reviewed the three recommended documents and found nothing of substance that would provide guidance to help UST operators meet these two obligations. Specifically, none of these documents provide procedures on measuring tanks prior to delivery or how to monitor the transfer.

Okay, I know you're probably thinking that everybody and their uncle knows that drivers do these things, not the owners and operators. Unfortunately, it's not that simple. One astute regulator recently pointed out that the lines of responsibility are sharply defined in the preamble of 40 CFR 280. I quote: "Thus, regardless of whether the owner and operator decides to share (by contract) responsibility for the monitoring of the transfer with the carrier, under today's final regulations the owner and operator will continue to be responsible in the event that there is a release during delivery."

The Missing Link in Overfill Prevention - continued from page 7

Observations

As UST equipment becomes more sophisticated, and as states start looking more closely at operational compliance of UST systems, outstanding problems are emerging. I believe overfills due to human error—not equipment error—will be the next big challenge in preventing environmental and safety hazards from USTs. National tank expert Marcel Moreau recently led a series of UST operator workshops in Alaska. He told audiences that based on his experience, the equipment alone will not stop overfills. The fundamental gap in preventing overfills lies not in the overfill equipment of the UST system or the safe highway transport to a gas station, but rather in the routine delivery of product to the tanks.

The magnitude of this issue extends well beyond the boundaries of Alaska. I forecast that this issue will surface sooner or later nationally. Indeed, the high-profile overfill and subsequent fire in Biloxi, Mississippi, should have been a wake-up call to industry and government.

Related to the incident was a recommendation from the NTSB to the UST owner R.R. Morrison and Sons, Inc. It stated: No Fast Lane employee compared the amount of gasoline scheduled for delivery with the amount that the station's monitoring system indicated was in the underground tanks to determine whether the quantity intended for delivery would fit in the underground tanks; such a comparison, in this case, would have prevented the overfill. [Emphasis added.]

I encourage you to get a copy of the NTSB report. It's chilling. Download the full report from http://www.ntsb.gov/Publictn/1999/HZM9902.htm.

I believe this failure to provide adequate guidance and training, and the lack of an articulated position from industry and government will add fuel to the next generation of UST problems. These problems arise from UST systems that are deemed safe by regulator and regulated alike, but that continue to be overfilled. Now some might call this matter trivial,

in that overfills happen less frequently than they used to, so why put so much effort into a problem that only happens now and then? My response is that while I agree that overfills don't happen every day, when they do, they happen big time and the consequences are, or can be, catastrophic.

Wanted: Recommended Practices

The Alaska Department of Environmental Conservation (ADEC) recently responded to an overfill at a convenience store in Anchorage that illustrates the nature of the problem.

It appears that the overfill resulted in a synergistic combination of problems that I suspect are typical of overfill incidents. The driver miscalculated the available ullage, the operator did not monitor the delivery, the overfill device failed to activate in time, and product escaped out an opening no one suspected—the loose cap of the automatic tank gauge probe. This investigation reinforces the notion that equipment alone will not prevent overfills from occurring.

We as a community need to look at the human element of the problem. Since 2000, the inspection of UST systems in Alaska has been privatized. This is a good first step in identifying and preventing problems such as overfills. ADEC has provided extensive guidance on how inspectors should measure operational compliance of UST systems.

While much guidance is in place for our inspectors, none exists for evaluating the operational methods that operators use to prevent overfills. We need a way to measure the requirements put forth in state and federal regulations that require UST owners and operators to measure the ullage in the tank prior to delivery and monitor the transfer. I know for a fact that most operators do neither on a regular basis, if at all. Most operators automatically defer the responsibility to the driver.

API has recently published a new standard, API 1007, Loading and Unloading of MC306/DOT 406

The Missing Link in Overfill Prevention - continued from page 8

Cargo Tank Motor Vehicles. Section 4 of this document deals with unloading USTs. While brief, it does begin to address the issue by standardizing procedures. The EPA Office of Underground Storage Tanks document, Operating and Maintaining Underground Storage Tank Systems: Practical Help and Checklists, also addresses delivery briefly. The problem with both of these documents is that they don't provide adequate guidance on owner and operator responsibility. What Alaska hopes to achieve is a recommended practice that we can provide to UST owners and operators to institute a safe, consistent, and common-sense approach to fuel delivery management. In an effort to begin addressing this issue, we created a Fuel Delivery Log that our third-party inspectors will begin circulating among tank operators this year. If nothing else, the introduction of this log will help stimulate discussion on this matter.

ADEC is working with the company whose overfill incident was previously mentioned and will be analyzing the overfill data from over 50 stores to try and ascertain some trends. Based on what we find, we also hope to hold a fuel delivery "summit" meeting later this year to attempt to build a coalition of tank operators, fuel delivery companies, and government officials that will be tasked with quantifying the problem as well as proposing some solutions.

NTSB Recommendations

There is currently not an organized regulatory voice to address this issue, although the NTSB Biloxi report asserts some broad recommendations:

- Develop loading and unloading procedures for cargo trucks with the policing of such procedures by the federal government;
- Improve compliance and enforcement by U.S. EPA;
- Revise delivery driver manuals;
- Establish procedures for UST operators; and
- Use national petroleum associations to help deliver the message.

I believe that an industry-based recommended practice for safe fuel delivery practices could address these recommendations. Defining responsibilities and guidance for UST operators could very well be the missing ingredient to an effective overfill prevention program. Some standardized items could include:

- Proper methods for measuring product levels;
- Use of tank charts;
- Understanding how much product is legally allowed in a tank;
- Procedures for monitoring transfers;
- Designation of whom should monitor deliveries;
- Warning about pressurized deliveries and ball float valves;
- Procedures for responding to overfill alarms or incidents; and
- Recordkeeping options.

In Short ...

I believe there is sufficient evidence to support the claim that there is no standardized method for helping UST owners and operators meet operational compliance conditions for preventing UST overfills. Overfills will continue to plague good tank management practices until the real culprit is addressed, namely human error.

This overfill issue can be addressed effectively by standardizing fuel delivery practices through the development of a nationally recognized recommended practice. To be effective, the standard must be based on common-sense practices, easy to implement by operators, and easy to enforce by regulators.

Ben Thomas is an environmental specialist with the Alaska Department of Environmental Conservation. He can be reached at:

ben_thomas@envircon.state.ak.us
Reprinted by permission from LUSTLine
Bulletin 39, November 2001

MTBE-munching microbes

By David Tenenbaum

ater smelling gunky? The culprit could be MTBE, a new gasoline additive used to cut smog in reformulated gasoline.

Although it's not yet proven that MTBE causes illness, water tastes foul when it contains just 40 parts per billion of the stuff that's formally known as methyl-tert butyl ether.

Regulators are increasingly concerned about MTBE contamination — and for good reason. Three billion gallons of the chemical were produced in the United States in 1997 for use in gasoline. Roughly 300,000 underground storage tanks have leaked gasoline. An unknown percentage of those leaks contain MTBE, which dissolves better — and travels farther — in water than proven carcinogens from gasoline like benzene. Normally, the gasoline hydrocarbons benzene and toluene break down before they travel more than about 500 feet from a leaking tank.

MTBE, however, is showing up in so much drinking water that California plans to phase it out by 2003, despite the chemical's smog-fighting abilities.

A new and highly optimistic clue to MTBE's fate in the environment comes from U.S. Geological Survey hydrologists who studied biological degradation of the chemical in sediments from streambeds near leaking underground storage tanks in South Carolina. The tanks were selected to be representative of the 3,000 leaking storage tanks in the state, says James Landmeyer, a USGS hydrologist from Columbia, S.C., who worked on the study.

Bugs devour chemicals

Here's what they did. The researchers simply extracted sediment containing an unknown zoo of microbes from the top layer of the streambed from the two sites, which were downstream, and within 300 feet of leaking storage tanks. Then they added MTBE and another gasoline additive, TBA, or terbutyl alcohol, to the soup.

Both chemicals were tagged with radioactive carbon for tracking purposes. Because MTBE produces

carbon dioxide as it breaks down, the amount of radioactive carbon dioxide in the container indicated how much MTBE had been destroyed.

The researchers determined that between 30 percent and 73 percent of the MTBE was destroyed in 100 days if



oxygen was present. Because MTBE did not break down in sediments that had been heated to kill microorganisms, the researchers credited biological activity for the degradation. In the stream itself, no MTBE was detected, even though the sampling was done just downstream of the leaking tanks.

At this point, it's not clear which organism deserves credit for the breakdown. "It's probably not one microbe, there are probably a community of microorganisms doing this deed," says Landmeyer.

The researchers are now trying to identify the microbes, which could lead to the development of bioreactors — think of them as artificial stream beds — that could clean up leaking tanks where the microbes and/or streams are absent.

It's unclear how many leaking underground gasoline storage tanks contain MTBE, says John Zogorski, a USGS specialist in the chemical. But in Kansas, 90 percent of the leaking tanks did contain the additive. Even though federal regulations should prevent most further leaks, existing plumes of pollution will continue to threaten groundwater for decades to come, says Landmeyer, justifying research into the chemical's fate in the environment.

continued on page 11

MTBE-munching microbes - continued from page 10

Marvelous microbes

As state and federal regulators decide how to deal with the wave of MTBE pollution, the new study could provide good news — that nature has the capacity to clean up after some of our mistakes. Whether or not existing studies can prove that MTBE is indeed hazardous to your health, Landmeyer says water with even 40 parts per billion of MTBE smells foul, and "You would not want to drink it."

Far better, naturally, would be to build gasoline tanks that don't leak in the first place, which is the aim of this program.

Since MTBE seems to be reducing smog in many metropolitan areas with high ozone concentrations, dumping MTBE — as California plans to do — to

protect groundwater amounts to a false dilemma between sacrificing our ability to breath and obtaining a clean drink of water. The Natural Resources Defense Council pointed out in a position paper: "The challenge is to preserve the air quality benefits that have resulted from reformulated gasoline ... while taking action to improve our protection of reservoirs, ground water and surface water."

Reprinted from The Why Files, June 1999
Courtesy University of Wisconsin Board of Regents

Tank inspections required 90 days before permits expire

s the second round of third-party UST compliance inspections gains momentum, some significant problems have come to light. Almost 40 percent of owners and operators are not obtaining inspections at least 90 days before their operating permits expire as required by rule. By not having an inspection conducted within the required time frame, the owner/operator risks formal enforcement action if violations are discovered and there isn't enough time to correct them before the operating permit expires.

It is the owner/operator's responsibility to ensure that:

- the inspection is conducted at least 90 days before the operating permit expires; and,
- the inspection paperwork is submitted to the department within 10 days of the inspection.

The department is now sending warning letters to those who do not adhere to the 90-day deadline. The department is also tracking the 10-day violations and may begin enforcement action if this problem continues.

Why doesn't MUST News ever write about . . .?

This publication, MUST News, invites readers to suggest articles for future issues.

Anything and everything related to industries that use, provide, install, maintain, and certify underground storage tanks in Montana is fair game for writing about in these pages.

We can help write and edit articles. We just need ideas and suggestions on subject matter.

If you have an idea, contact MUST News coordinator Bill Hanson, by phone at 406-841-5016, or e-mail: **bihanson@state.mt.us.**

